

Montgomery County Fire & Rescue Service

POST INCIDENT ANALYSIS

Great Seneca Highway & Horn Point Drive
Darnestown, MD 20878

F14-0000196



January 1st 2014

Submitted by
Division Chief Scott Goldstein

Table of Content

TABLE OF CONTENT	2
Incident Overview	3
Dispatch Summary	3
Communications	4
On Scene Operations	5
Scene Safety	6
Staging	6
Patient Disposition	7
Lessons Learned	7
Requesting Resources	7
Scene Survey and Patient Identification	8
Transition of Command and Information Exchange	9
Scene Access and Safety	10
Patient/Family Transport	10
Patient Disposition	11
Summary	11

INCIDENT OVERVIEW

This Post Incident Analysis is based upon the review of the incident audio tape, review of FireApp reports, and interviews with personnel that operated on the incident.

On January 1st, 2014 at 16:47 hours Montgomery County Fire Rescue dispatched units for a reported two (2) vehicle crash at Great Seneca Highway and Horn Point Drive in Gaithersburg. The weather at the time was an air temperature of 46 F roughly 40% humidity and winds from the south/southeast at 7 miles per hour and partly cloudy skies.

Company 31 units arrived to find a two (2) vehicle crash with ultimately ten (10) patients. This initiated a mass casualty incident (MCI) response to rapidly package and prepare for transport nine (9) patients to four (4) area hospitals in one hour and 10 minutes.

All crews worked well together and overcame some challenges and took away lessons learned.

DISPATCH SUMMARY

911 Call received: 16:44

Call enters pending: 16:46

PIC dispatched: 16:47

Engines

Paramedic Engine 731

Special Service

Truck 731

Rescue Squad 703

EMS

Ambulance 732

EMS Task Force: 16:58

Special Service

Rescue Squad 729

EMS

Medic 729

Medic 708

Medic 731

Ambulance 708

Requested 2 additional BLS 17:27

EMS

Ambulance 734

Ambulance 728

Additional Units that responded

OC700	Operations Chief
EMS703	EMS Supervisor
BC705	Battalion Chief
DC700	Duty Chief
CB700	Communications Battalion
C703E	Chief 703 Echo

COMMUNICATIONS

There were no 800 MHZ radio problems on this event.

The transportation/disposition officer effectively utilized the 72-Charlie talk group to contact EMRC. EMRC then directed operations to 72 Delta. Initially it was unclear how many patients there were and how severe their injuries were.

Therefore the initial consult was used to do two things:

1. Advise the local hospitals of the MCI event
2. Determine availability and location of trauma beds

EMRC was characteristically helpful and facilitated multiple conversations between hospitals including Suburban, MedStar, and Children's hospitals. It was difficult to get an exact count of the patients and/or the severity of injury as the incident evolved.

The transportation/disposition officer basically gathered information by listening in on the conversations of the command team assembled outside.

As the transport destinations were determined the transportation/disposition officer relayed that information to the hospitals and advised them that a further consult from the transporting unit was likely.

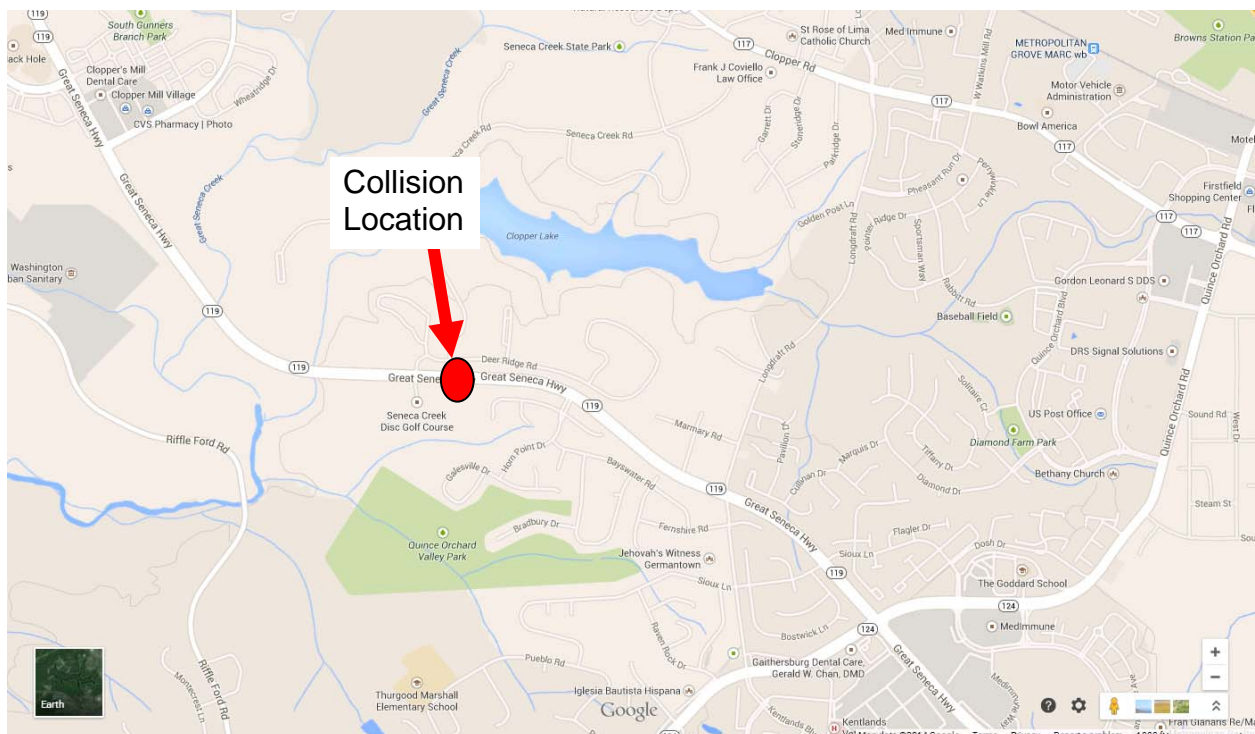
ON SCENE OPERATIONS

As Company 31 units approached the dispatch location they observed nothing and continued northwest on Great Seneca Highway. They discovered the incident scene to encompass the southbound/eastbound portions Great Seneca Highway near the Seneca Creek State Park overpass. Based upon the location, Company 31 units traveled past the accident and turned around at the WSSC access road.

Company 31 arrived on-scene to find a two (2) vehicle collision as a result of a sedan travelling north on Great Seneca Highway that cross the grassy median and struck a minivan head-on. Truck 731 began scene assessment and determined that there were roughly eight (8) patients. Truck 731 established Command and declared the event a Mass Casualty Incident and requested an EMS Task Force.

The AFRA medic from Paramedic Engine 731 was assigned to start triage and confirmed eight (8) patients. Command began the task of patient tracking and developed initial disposition.

As additional resources arrived, the Operations Chief arrived and assumed command from Truck 731. Additional command and support staff arrived including Battalion Chief 705, the Communications Battalion, EMS703, Chief 703 Echo, and the Duty Chief.



Scene Safety

The incident was in the south bound lanes of Great Seneca Highway between Mateny Road and Horn Point Drive. The vehicles completely blocked all of the south bound lanes.

Ambulance 732 initially stopped in lane # 1 in the north bound portion of Great Seneca Highway without adequate blocking or safety control zones. This was rapidly fixed by the officer of Engine 731 by instructing Ambulance 732 to proceed up Great Seneca Highway to the WSSC plant and to return on the south bound lanes.

To avoid this, when the EMS Task Force was requested, access directions were provided. The direction was for all EMS units to access from Great Seneca Highway at Longdraft Road and to utilize the wrong side of Great Seneca from Horn Point Drive.

Some additional EMS units arrived via the announced instructions while others arrived via the northbound lanes of Great Seneca Highway. The arrival of additional command and support vehicles on the northbound lane provided much needed blocking and advance warning but was not ideal.

Chief 703 Echo was assigned the Incident Scene Safety Officer and he expanded on the initial inner circle and outer circle safety checks performed by Company 31 units. No injuries to fire rescue personnel were reported.

STAGING

As outlined in the safety function, a good plan for EMS unit access and staging was developed and communicated by Command. Later arriving transport units failed to follow the access instructions provided by command. This proved problematic later into the incident.

PATIENT DISPOSITION

Below outlines the patient vehicle location before the collision, age, nature, the unit assigned and priority and category

Patient 1	Van Middle	20 y/o female	A732	Priority 3	Shady Grove
Patient 2	Van Middle	71 y/o female	M729	Priority 2	Suburban
Patient 3	Van Rear	14 y/o female	M708	Category D Abdominal Priority 2 Category C Facial	Children's
Patient 4	Van Rear	8 y/o female	A708	Priority 3	Shady Grove
Patient 5	Van Rear	8 y/o female	A708	Priority 3	Shady Grove
Patient 6	Van Rear	9 y/o female	A732	Priority 3	Shady Grove
Patient 7	Sedan Front	15 y/o male	M731	Priority 3	Suburban
Patient 8	Sedan Front		Refused		
Patient 9	Van Front	45 y/o male	A728	Priority 3	Shady Grove
Patient 10	Van Front	40 y/o female	A732	Priority 3	Germantown

LESSONS LEARNED

Requesting Resources

As Company 31 arrived and determined the initial patient count, an EMS task force was requested. This resulted in the dispatch of two (2) medic units, one (1) ambulance, and one (1) rescue squad. Luckily the original rescue squad on the incident was Rescue Squad 703, due to Rescue Squad 729 being committed.

When dispatched for the EMS task force, Rescue Squad 729 was not needed for extrication purposes and was utilized for manpower. As a static assignment to this section of Great Seneca Highway, four (4) other primary units / manpower units are recommended by CAD before Rescue Squad 729. Eight (8) other primary units / manpower units are recommended before Rescue Squad 703 had it been the EMS task force rescue squad.

Recommendation

Request single unit resources as needed. If the Incident Commander needs additional ALS transport units, BLS transport units, and manpower (hands) units, request them specifically.

The EMS Section and Communications Section should continue work on modifying the EMS task force composition. Considerations that must be evaluated include the number of ALS providers, the number of transport units, the specialty EMS units, and manpower requirements.

Scene Survey and Patient Identification

Upon initial arrival on-scene and patient assessment, Command determined that there were eight (8) patients. As patient packaging and disposition was in-progress, two (2) additional patients were discovered. These additional patients were the driver and front seat passenger of the van, who had not presented as vehicle occupants or patients. Fire Rescue personnel had presumed that these patients were family members that arrived on-scene prior to Fire Rescue.

When it was discovered that all transport units had been committed and no additional capacity had been staged, additional transport units had to be requested.

Recommendation

The rapid corralling and identification of all parties involved in the incident is critical. This assessment must include vehicles, bystanders, and pedestrians.

While all personnel in the vehicle(s) involved are not necessarily patients and may not require transport, they all must be located and surveyed.

When tracking patients key elements to gather and track includes:

- Age
- Gender
- Location at time of collision
- Condition and severity
- Assigned transport unit
- Hospital destination

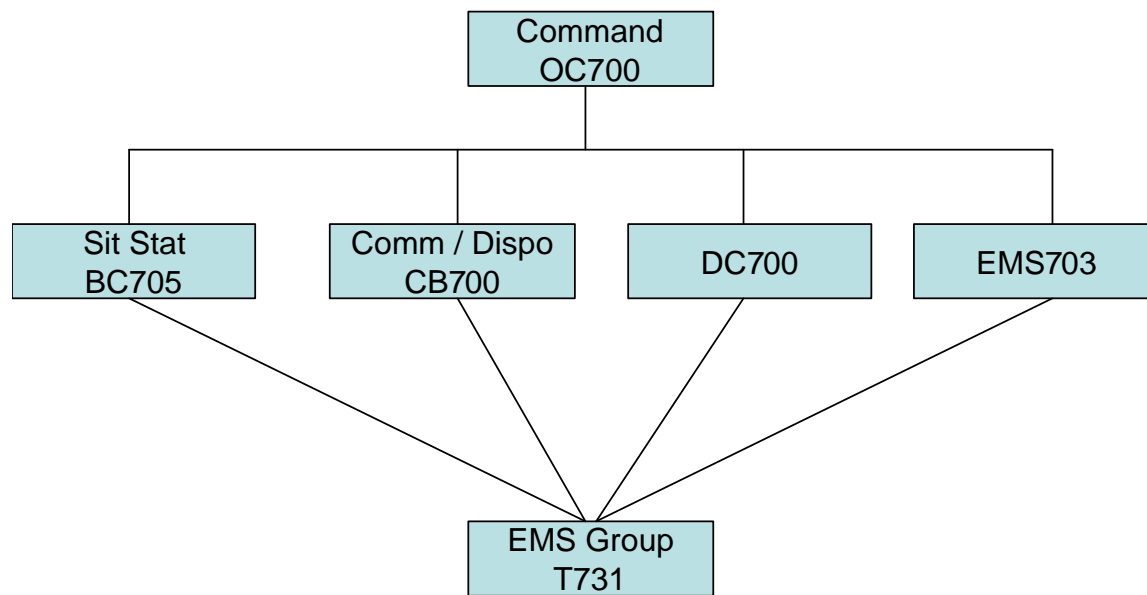
On MCI events, Command should always keep an EMS unit staged until all known patients are transported and a final scene survey is completed. This will prevent lengthy delays if subsequent units are requested.

Transition of Command and Information Exchange

As the Operations Chief arrived on scene, the Incident Command was transferred from Truck 731's officer to the Operations Chief. This transition occurred face to face at which time the list of patient count and EMS unit assignments was transitioned. Truck 731 was transitioned to the EMS Group Supervisor.

Shortly after this the Communications Battalion and Battalion 705 arrived and were assigned ICS roles of *Disposition/Communications* and *Situation Status* respectively. These two officers then proceeded to meet with the EMS Group Supervisor and each separately asked for a patient status report and summary. This resulted in the EMS Group Supervisor having to repeat the transition information and complicated the task of managing patients and resources.

The organization chart below reflects the perceived structure by the EMS Group Supervisor.

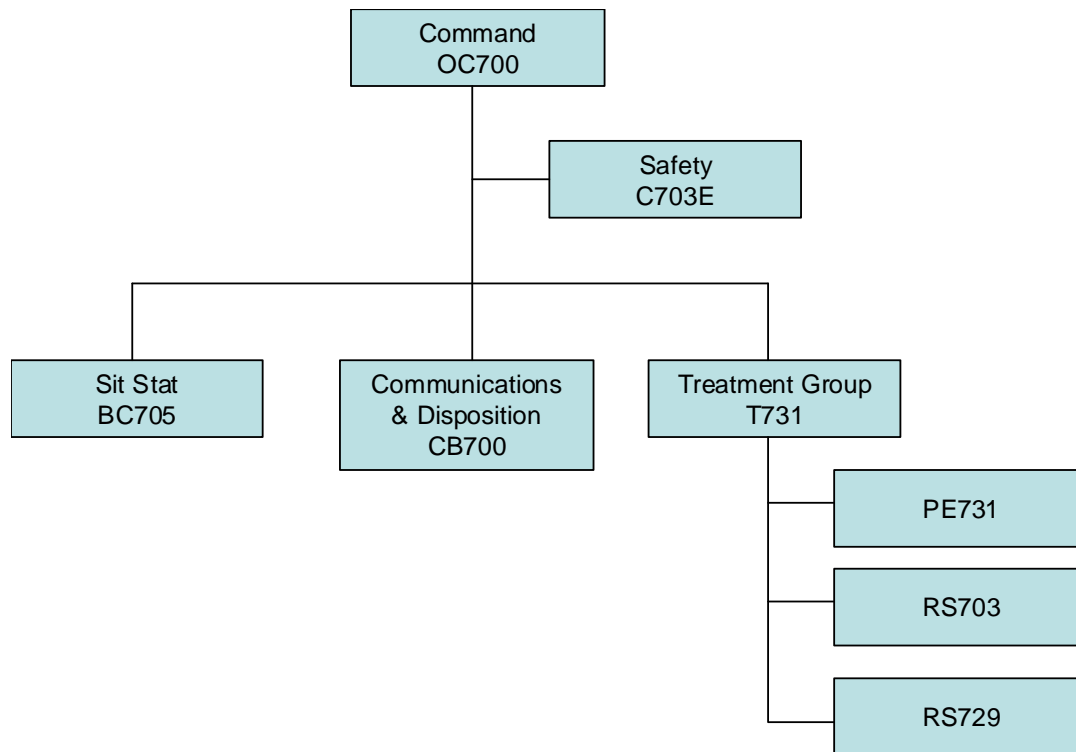


This redundant work effort was the result of the failure of Command to announce the assignments of *Disposition/Communication* and *Situation Status* immediately upon assignment

Recommendation

The assignment of incident management roles must include a verbal transmission on the appropriate tactical/operations talk group. Once assigned, incident management staff must refrain from requesting duplicate summary reports from operational staff.

Command should have identified Truck 731 as the Triage Group or the Treatment Group to avoid this confusion:



Scene Access and Safety

Command clearly designated an access path and instructions for EMS units. At least two of the additional EMS units did not comply and possibly placed their crew, units, and patients at higher risk/danger.

Recommendation

Responding units must follow access instructions.

Patient/Family Transport

As personnel were faced with eight (8) members of the same family all requiring transport to local hospitals, the selections of destinations split the family members across four (4) hospitals. This was necessitated due to the patient's age, medical condition, and receiving facility capacity.

Personnel on-scene placed deliberate thought and consideration into the separation of family members by sending an older sibling along with the younger children.

Recommendation

When possible, patients should be transported to the same hospital as their family members. If needed consideration should be provided to transporting different patients from the same family to adjacent hospitals.

Patient Disposition

During a Mass Casualty Incident the transport destination of each patient is selected while weighing many factors, including the patient's condition, associated family, and receiving facility capacity.

During this incident, several units attempted to change the destination of their assigned patient (s). While these changes were of the best intentions, they were being made without the knowledge of the factors that lead to the selection.

The "change" then creates confusion and additional work to track down the correct information and to maintain the established patient tracking.

Recommendation

Transporting EMS units must not change their assigned transport destination.

SUMMARY

All personnel that responded to this event were faced with a MCI with multiple severely injured patients. All personnel operated effectively to triage, treat/package, and transport nine (9) patients. This incident provides several critical lessons learned that focus on responder safety, patient management skills, and resource requests.